The Identity of Anisolabis kudagae Burr (Dermaptera: Carcinophoridae), and a Description of a New Species of Anisolabis from Sri Lanka

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Only two species of Anisolabis have previously been recorded from Sri Lanka; these species are endemic and can be easily separated from each other on external characters, A. greeni Burr having rudimentary elytra, whilst A. kudagae Burr lacks all traces of elytra. In an account of the Dermaptera of Ceylon (Brindle, 1971), based on material collected by the Lund University Expedition in 1962, two series of specimens agreeing on external characters with the descriptions of greeni and kudagae were recorded, but since the male genitalia of the latter corresponded with the genus Euborellia and not Anisolabis, kudgae was transferred to Euborellia.

A further series of Dermaptera from Sri Lanka, collected by a team from the Geneva Museum in 1970, has recently been examined, and in this material were two species of *Anisolabis*, again agreeing with *greeni* and *kudagae*. The male genitalia of the latter, however, corresponded with *Anisolabis* and not *Euborellia*. The *kudagae* of the Lund material and the *kudagae* of the Geneva material were obviously different.

Burr (1915) figures the male genitalia of kudagae (Pl. XI, fig. 1) but this figure does not agree with the genitalia of the Lund kudagae, nor with the genitalia of the Geneva kudagae, so a re-examination of the male type of kudagae was obviously desirable.

In the Burr material, now in the general collection of Dermaptera in the British Museum (Natural History), are three specimens of kudagae, the male and female syntypes from Hakgala, and a third, male, from Maskeliya, the latter mentioned in Burr (1910). A collection of microscopical slides, mainly of male genitalia, and presumably those from which the figures in Burr (1915) are drawn, is also in the British Museum, near the Dermaptera collection. The slides are cross-referenced to the collection, so that any slide referring to any particular species can be easily found, although it is not always possible to correlate a slide to any particular specimen. The single slide with male genitalia labelled Anisolabis kudagae was examined, and this corresponds with the figure in Burr (1915).

A comparison of the male specimen named as *kudagae* from the Geneva material with the male type of *kudgae* showed that both are identical externally, and it was noted that the male type appeared to be intact, and the penultimate sternite beneath which the genitalia are situated seemed to be undisturbed. The male from Maskeliya, however, lacks the penultimate sternite and the genitalia are missing. This suggested the possibility that the genitalia on the slide marked *Anisolabis*

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kudagae actually came from the Maskeliya male. Permission was kindly given to examine the type male to check if the genitalia had been removed, and this showed that the genitalia were intact. The genitalia have now been removed and mounted in Euparal on a small piece of celluloid attached to the pin of the type male, and these genitalia correspond with the genitalia of the kudagae male from Geneva. It seems clear, therefore, that the male genitalia on the slide and figured in Burr (1915) as kudagae refer to the male specimen from Maskeliya, which represents a new species and which is separable from kudagae by external characters as well as by male genitalia.

There are thus three endemic species of Anisolabis now recorded from Sri Lanka — greeni, kudagae, and the new species described below. The species recorded in Brindle (1971) as Euborellia kudagae apparently represents a new species of Euborellia, but since the relevant specimens have been loaned to Dr. Srivastava of the Survey of India, in connection with the preparation of a new volume on Indian Dermaptera, I have suggested to Dr. Srivastava (in litt.) that he deals with this

himself.

I am indebted to Dr. D. R. Ragge and Mrs. J. A Marshall of the British Museum (Natural History) for permission to examine the types mentioned.

Anisolabis rubella sp.n.

Anisolabis kudagae Burr: Burr, 1910, F. Brit. India, Derm.: 84 (partim, male from Maskeliya only).

Anisolabis kudagae Burr: Burr, 1915, J.R. micr. Soc., 1915:

Pl. XI, fig. 1 (genitalia).

Shining reddish-brown, legs yellow, antennae yellowish basally, apical part of segment 3 and remaining distal segments dark brown. Cuticle of head, pronotum, and first two abdominal tergites impunctate and glabrous, other abdominal tergites punctured, the punctures increasing in size and density on posterior tergites, largest on tergite 9; last tergite more or

less impunctate.

Male (fig. 1): head broad, tumid, epicranial sutures prominent, eyes small. Pronotum nearly as long as broad, widened posteriorly, mesonotum transverse, relatively long; metanotum short, hidden by mesonotum (largely due to curvaabdomen), posterior margin concave. broadened distally, lateral margins of tergites produced but not pointed, and those of tergites 8-9 and base of 10 rugosostriate but without ridges. Last tergite large, with a lateral curved ridge toward dorsum, posterior margin excised at each side. Penultimate sternite missing. Each branch of forceps short, broad, trigonal at base, dorsal edge blackish and prominent, inner margin with small denticulations, branches asymmetrical. Genitalia (on slide) (fig. 2) with long parameres, right paramere (position in insect) missing except for extreme base; denticulations on the distal lobes, shown in the figure in Burr (1915) not clearly visible. Length of body 13 mm., forceps 2.5 mm. Female unknown.

Holotype &, Maskeliya, Green: Caught at light, Maskeliya, Ceylon, 4-05 (= April 1905). British Museum (Natural

History).

The type has only the front pair of legs remaining but is in excellent condition. It appears to be fully mature, so that the reddish colouration is thought to be an adult character and not due to slight immaturity. Burr (1910, p. 84) remarks "The specimen from Maskeliya, sent by Mr. Green, is somewhat smaller than the type and much lighter and redder in colour".

Anisolabis kudagae Burr

Anisolabis kudagae Burr, 1901, J. Bombay nat. Hist. Soc., **14**: 320.

Anisolabis kudagae Burr: Burr, 1910, F. Brit. India, Derm.: 84 (partim, male and female from Hatton only).

Blackish, legs dark brown, femora blackish at base,

antennae yellowish basally, dark brown distally.

Male: similar to rubella but pronotum strongly transverse; puncturation on abdomen finer; lateral parts of tergites 7, 8, 9 and base of 10 rugoso-striate; last tergite with a dorsolateral prominence. Penultimate sternite with posterior margin excised medially. Length of body 16.5 mm., forceps 2.5 mm. Genitalia fig. 3.

Female: similar to male but last tergite narrower, branches of forceps short, triagonal at base, almost straight and symmetrical. Length of body 13.5 mm., forceps 3.25 mm.

1 ô, 1 ♀ syntypes, Kudaga, Hatton, Ceylon, VII/97, O.O.W. (British Museum (Natural History)).

Burr (1910) also mentions specimens from Hakgala and Patipola in the Burr material, but these specimens have not been located. The locality Hatton is also given as Hutton in various papers, but the locality labels on the types give "Hatton'

Rejected record: Northern India (Kumaon), Gangola (1968). This author places this species and A. dubronii Kirby in the subfamily Brachylabiinae which is an error for Carcinophorinae. A. kudagae is endemic to Ceylon.

The third species of Anisolabis from Sri Lanka, A. greeni Burr, is a blackish species distinct by having rudimentary

elytra on the mesonotum.

References

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